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A NEW GENUS OF TAENIODONTS FROM THE LATE PALEOCENE

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Until rather recently, knowledge of Late Paleocene members of the peculiar mammalian order Taeniodonta was limited to fragmentary material from the Bear Creek local fauna of Montana. Chicago Natural History Museum expeditions, working in the DeBeque formation of western Colorado, Plateau Valley local fauna, were fortunate in obtaining material sufficiently complete for adequate comparison with previously known forms. Study of this material indicates that the Late Paleocene representatives of the group should be placed in a new genus, intermediate structurally, and almost surely phyletically, between *Psittacotherium* of the Mid Paleocene Torrejonian and *Ectoganus* of the Early Eocene Wasatchian.

I am publishing a review of the order in this series and a discussion of its evolution elsewhere (*Genetics, Paleontology and Evolution*, Princeton University Press). The review originally contained the diagnosis given below. It now appears certain that the discussion will be the first of the two to appear, thus making this preliminary note necessary.

Order Taeniodonta
Family Stylinodontidae
Subfamily Stylinodontinae
Lampadophorus¹ gen. nov.

Type species.—*Lampadophorus expectatus* sp. nov.

Referred species.—*Psittacotherium(?) lobdelli* Simpson.

Distribution.—Late Paleocene. Plateau Valley local fauna, Colorado; Bear Creek local fauna, Montana.

¹ λαμπτας, ádos, torch, and φορός, bearer, in allusion to the light thrown by this form on stylinodont taxonomy and phylogeny.

Diagnosis.—Canines rootless, enamel-free portions more compressed than in *Psittacotherium*. Cheek teeth with cement at bases of crowns, roots with vestiges of former divisions; crowns higher than in *Psittacotherium*, lower than in *Ectoganus*; little or no tendency toward development of enamel-free bands on anterior and posterior faces. P^{1-2} smaller than in *Ectoganus*; ridges running externally from protocones of P^{3-4} as in *Ectoganus*, more crenulated than in *Psittacotherium*. M^3 wider than in *Psittacotherium*, hypocone less isolated than in *Ectoganus*. P_{3-4} with independent talonid crests.

Lampadophorus expectatus¹ sp. nov.

Type.—C.N.H.M. No. P26083, incomplete skull and various incomplete skeletal parts of an immature individual.

Horizon and locality.—Tiffanian; DeBeque formation, Plateau Valley local fauna. Three and one-quarter miles west of DeBeque, Mesa County, Colorado.

Hypodigm.—Type and C.N.H.M. Nos.: P15569, RP³; P15575, LP₄; P14906, RP₃₋₄; P14954, P15008 and P26101, incomplete lower molars (either M_1 or M_2); P26090, left humerus; P26093, lower molar; P26106, lower canine; PM241, lower incisor. All from Plateau Valley local fauna.

Diagnosis.— P^4 with crown more compressed antero-posteriorly, main external cusp more centrally placed, postero-external cusp less distinct than in *L. lobdelli* Simpson, incipient groove on internal face.

Lampadophorus lobdelli Simpson

Psittacotherium(?) lobdelli Simpson 1929, Amer. Mus. Nov., No. 345, p. 11.

Emended diagnosis.— P^4 longer antero-posteriorly than in *L. expectatus*, enamel prongs on external face better developed, postero-external cusp more isolated, no groove on internal face.

¹The existence of a Late Paleocene genus intermediate between *Psittacotherium* and *Ectoganus* has been suspected for some time.



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